New World Paradigm, Ltd.
401 12th Street South, No. 1421
Arlington, VA 22202
Phone: 1.703.418.2136
Fax: 1.703.418.0040

New World Paradigm, LTD.

EX PARTE OR LATE FILED

August 26, 1998

Office of the Secretary
Federal Communications Commission
1919 M Street, NW
Washington, DC 20554

Dear Secretary Salas:

Pursuant to 47 C.F.R. § 1.1206(b), this letter provides copies of a Written Ex Parte Presentation relating to CS Docket No. 98-120(FCC 98-153) and CC Docket No. 98-147(FCC 98-188) for inclusion in the public record of the proceedings. Two copies of the Written Presentation are provided for each docket.

Sincerely,

Stephen N. Brown
Director of Public & Technology Policy
Attachments (4)

This is a copy of a Written Ex Parte Presentation relating to CS Docket No. 98-120(FCC-98-153) and CC Docket No. 98-147(FCC 98-188)

Information Capacity

- •Radiative
  - -Spectrum Limits
  - -Power Limits
- • Wired
  - -Single path emulates limits (old cable concept)
  - -Multi-path: Addressable; Capacity without Limits

Signal Design

- •Radiated
  - -Conserve Spectrum → Rationing Signal Space
  - -Master Signal (digital) most effectively occupying signal space
- •Wired
  - -Single path emulates limits
  - -Multi-path: Digital Addressable; Unlimited Signal Space

In Digital: Coding → Arbitrarily Low Delivered Error Rates.
ERGO: Fully digital channel, addressable, multiple party (two-*way*)

Cable

- •Fully digital cable can deliver old **analog as well digital** signal from digital carriage.
- •Diverges from "antenna" concept of cable

UVICS

- •Any Format, Any Protocol
- •Dynamic System
- •Dynamic Packet Data
- •Dynamic Compression
- •Can Interpret Analog or Digital Signals

TV

- •CRT Concept
  - -Scan Lines
  - -Synch
- •UVICS Concept
  - -Pixel Array Map
  - -Clock + Data

THE KHAMSIN CABLE SYSTEM:

Integrates the Cable Distribution Network and the Local Telephone Loop Into A Digital National Telecommunications Infrastructure

BANDWIDTH:

Dual 622 Mbps - 2-Paths - Upstream And Downstream Entirely Digital -Allowing Any Video, Voice And Data To Be Handled On One Wire

SIGNAL TO NOISE RATIO:

Sustains A Designed Value Of Signal To Noise Ratio From Source To Viewer , Listener And Consumer Creates A Vast Market For Passive Information Services

ARCHITECTURE TYPE:

Ip Addressable Catv Joins The Worldwide Wired Telecommunications Networks

INTERFERENCE LEVELS:

None - No Xtlk, No Emi, No Cable Transmission Losses

TRANSPORT METHOD:

Sdh/Sonet Packet Protocol

CABLE FACTS:

Long Lived Design Life Based On New Polymers And New Methods Of Fabrication In Manufacturing

INPUT MATERIALS AND COSTS:

Electric Conductors And Cutting Edge Fiber Optics Materials Are Inexpensive And Readily Available In Domestic Market

ELECTRIC POWER REQUIREMENTS:

Very Low - System Has Battery Backup To Survive Power Failures

DESIGN RELIABILITY:

Very High -System Outage Less Than 10 Seconds Per Year

NEW CONSTRUCTION REQUIRED:

Yes Thousands Of New Jobs In Installation And In Passive Services Market

CAPITAL COSTS:

Expected To Be Low Given Current Cost Of Long Term Debt And Equity

FUNDAMENTAL CHANGE IN THE TELEVISION INDUSTRY:

The Art And Analytics Of Sending A Television Signal From The Studio To The Consumer Are Changed Because The Khamsin System Delivers Unlimited Numbers Of Channels

IMPACT ON MUST CARRY (I):

The Spectrum Rationing Policy Of The Radiated Spectrum Does Not Apply In The Wired World Cable Companies Will Be Able To Simulacast Without Blocking Current Or Forthcoming Channels

IMPACT ON SIGNAL DEGRADATION CONCERNS:

Solved By Khamsin System

IMPACT ON MUST CARRY (II):

An On Schedule Return Of Spectrum To The Public Trust

IMPACT ON CABLE BUILD OUT SCHEDULES:

A Rethinking And Likely Delay Of Current Plans To Assess This New Technology

IMPACT ON DISSEMINATION OF INFORMATION:

Promotes The Public Access To Diverse Sources Of Information

ACHIEVING LOW COST ACCESS:

Multiplicity Of Uses And Sources Drives Down Average Cost Per Information Bit

ADDRESSABLE CHANNELS:

Consumer Like Inet Users, Pick A Channel Address They Wish To View More Capacity Is Available Because Companies No Longer Have To Deliver All Channels At The Same Time To Consumers

CHANNEL WIDTH NO LONGER FIXED AT 6 MHZ:

Traditional Width Based On The Constraints Of The Radiated Spectrum In The Wired Network Channel Width Can Vary Almost At Will According To The Designs Of The Studio

STATIONS CONCERNS ABOUT LIMITS ON RADIATED POWER DIMINISH:

In The Wired Digital Network The Television Industry No Longer Faces A Tradeoff Between Coverage And Interference, Reduced Power Levels And Competitive Disadvantage

DTV TO DTV ADJACENT CHANNEL INTERFERENCE BYPASSED:

Offering Addressable Channels Gives All Stations The Option Of Piping Their Services To A Video Server Delivering The Highest Quality Resolution

NONCOMMERCIAL TELEVISION:

Video On Demand Easily Achievable For Education And Other Beneficial Uses

OTHER EFFECTS:IMPACT ON RECEIVERS AND SET TOP BOXES:

A New Technology - Uvics - Universal Visual Image Communication System Which Allows Software Rather Than Hardware To Direct The Production And Reconstruction Of Visual Images

A NEW WAY OF REPRESENTING A VISUAL IMAGE:

Increased Capacity Achieved By Digital Transmission Enables Pixel Arrays To Be Addressed By Coding Which Accompanies The Specific Television Program Watched By The Consumer

STANDARDS SETTING:

Aspect Ratios Become A Variable And Are No Longer Constrained To 1 Of 18 Atsc Codes

ACCESS-CONCERNS HAVE A NEW FOCUS:

Video Servers And Access To Them Acquire A New Importance

SIGNAL DESIGN IN RADIATED SPECTRUM CHANGES:

Signal Strategy Reorganized Around An Sdh Like System, Where A Single Master Transmitter Provides All Channels In An Area

WIRELESS SPECTRUM OPEN TO MORE USES:

Additional Public Safety Uses And New Entrepreneurial Uses Of Radiated Spectrum Become Available

IMPACT ON THE LOCAL LOOP:

Superior To Xdsl Technology

NATIONAL STANDARDS ON LOOP CONDITIONING:

No Longer Needed Regulatory Policy Should Not Increase The Longevity Of Outdated Plant

CENTRAL OFFICE CONCEPT CHANGES:

No Dial Tones, No Busy Signals, Nonblocking Switches, Number Portability And No Number Shortage

CIRCUIT SWITCHING ENDS:

Voice Treated Like Data In An Addressable Ip Type Network

MUCH IMPROVED INTERNET ACCESS:

Always On At T1 And T3 Speeds If Desired

IMPACT ON COMMUNITY ORGANIZATION:

Potentially Better Informed Neighborhoods And More Commerce